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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/688,032  
Filing Date: October 15, 2003  
Appellant(s): TOLAN ET AL.

**MAILED**

AUG 09 2007

**GROUP 3600**

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Brett A. Krueger  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 03 April 2007 appealing from the Office action mailed 31 July 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct. Examiner notes that an obvious typing error has been corrected –it is not cancelled claim 21, but claim 23, similar to claims 6 and 40, that is rejected as being unpatentable over Kingsford et al. in view of Provost et al. and further in view of Kennedy et al. Also, examiner clarifies other minor typing errors by noting that it is claims 1-3, 7-20, 24-37 and 39-54, not 39-57, that are rejected under 35 U.S.C. 103(a) as being unpatentable over Kingsford et al. (US 6,851,161 B2) in view of Provost et al. (US 4,984,339) and Kennedy (US 6,248,419); and finally, examiner notes that the US Patent number for Kennedy et al. is US 6,248,419, not 6,348,419.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,984,339	Provost et al.	1-1191
6,248,419	Kennedy	6-2001
6,851,161	Kingsford et al.	2-2005

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 7-20, 24-37 and 39-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kingsford et al. (US 6,851,161 B2) in view of Provost et al. (US 4,984,339) and Kennedy (US 6,248,419).

Kingsford discloses a releasable touch fastener (10) comprising a loop component (12) and a hook component (14). The loop component has a sheet-form loop base and an array of female fastener elements (16) extending from the loop base. The hook component has a sheet-form base and an array of male fastener elements (18) extending from the base and releasably engaging the female fastener elements of the loop component (Figs. 1, 1A and 3-7). The touch fastener has an engaged thickness of less than about 0.11 inch (C. 3, L. 63-65). Kingsford further comprises a male seal profile portion (22,74,94) that engages a female seal profile portion (20,70,90). Kingsford fails to disclose that the releasable touch fastener has hook and loop components provided with a Final Peel Resistance of at least 0.3 pounds per inch

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of closure width. However, Provost teaches a releasable touch fastener comprising a loop component (48,50) and a hook component (20). The loop component has a sheet-form loop base (48) and an array of female fastener elements (50) extending from the loop base. The hook component has a sheet-form base (24) and an array of male fastener elements (22) extending from the base and releasably engaging the female fastener elements of the loop component (Figs. 17-24). The hook and loop components are provided with a Final Peel Resistance of at least 0.3 pounds per inch of closure width (Table III for all materials illustrated). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a releasable touch fastener provided with at least 0.3 pounds per inch of closure width as taught by Provost in the fastener disclosed by Kingsford since hook and loop components having at least 0.3 pounds per inch of closure width are well known in the art as taught by Provost and will help to retain some tension necessary to create some compression between the male and female seal profile portions to create a better seal for the closure (C. 4, L. 61-67 and C. 5, L. 1).

Provost also teaches that:

- The hook and loop components provide an Initial Peel Resistance of at least 0.5 pounds per inch of closure width (Table III for all materials illustrated).
- The hook and loop components provide an Initial Shear Resistance of at least 10 pounds per square inch (Table III for all materials illustrated).
- The hook base comprises a sheet of resin and the male fastener elements have stems extending contiguously from the sheet of resin (Figs. 11-25).

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- The male fastener elements have molded crooks (Figs. 11-25).
- The fastener elements are arranged in a density of 350 fastener elements per square inch of the base (C. 9, L. 61-67).
- The stems have opposing surfaces defined by severed resin (Figs. 11-25).
- The Final Peel Resistance is at least 0.4 pound per inch of closure width (Table III for all materials illustrated).
- The Final Peel Resistance is at least 0.5 pound per inch of closure width (Table III for all materials illustrated).

Kingsford and Provost fail to disclose that each male fastener elements has two crooks extending in opposite directions along the hook base. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have each male fastener elements has two crooks extending in opposite directions along the hook base because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

Kingsford and Provost disclose the details of the hook component. Kingsford and Provost fail to disclose that the loop component comprises a woven fabric. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a woven fabric because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

Kingsford also discloses that:

- The Engaged Thickness is less than 0.10 inch (C. 3, L. 63-65).
- The Engaged Thickness is less than 0.09 inch (C. 3, L. 63-65).

- The Engaged Thickness is less than 0.08 inch (C. 3, L. 63-65).

For claim 19, a combination of rejections of claims 1 and 2 will result in the limitations of claim 19 without taking into consideration the Final Peel Resistance of at least 0.3 pound per inch of closure width.

Provost also teaches that:

- The Initial Peel Resistance is at least 0.6 pound per inch of closure width (Table III for all materials illustrated).
- The Initial Peel Resistance is at least 0.69 pound per inch of closure width (Table III for all materials illustrated).
- The Initial Peel Resistance is at least 0.8 pound per inch of closure width (Table III for all materials illustrated).

For claim 37, a combination of rejections of claims 1 and 3 will result in the limitations of claim 37 without taking into consideration the Final Peel Resistance of at least 0.3 pound per inch of closure width.

Provost also discloses that:

- The Initial Shear Resistance is at least 15 pound per square inch (Table III for most of the materials illustrated).
- The Initial Shear Resistance is at least 20 pound per square inch (Table III for most of the materials illustrated).

The Initial Shear Resistance is at least 25 pound per square inch (Table III for most of the materials illustrated).

Claims 5, 6, 23, 22, 39, 40 and 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kingsford et al. in view of Provost et al. as applied to claim 1, 19 and 37 above, and further in view of Kennedy et al. (US 6,248,419 B1).

Kingsford and Provost fail to disclose that the hook component has a Stitch Hole Tear Strength of at least 2.0 pounds. However, Kennedy teaches a releasable touch fastener comprising a hook component (20,21). The hook component has a sheet-form base (20) and an array of male fastener elements (21) extending from the base and releasably engaging female fastener elements (Fig. 6). The base has a fabric backing (25) at a side of the hook base opposite the fastener elements (Fig. 6). The fabric backing adds strength to the base and also provides a substantial modification of the base of the hook component (C. 6, L. 3-8). Such reinforcement can provide a Stitch Hole Tear Strength of at least 2.0 pounds. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a fabric backing at a side of the hook base opposite the fastener elements of the hook component as taught by Kennedy in the touch fastener disclosed by Kingsford and modified by Provost so that the hook component can have a Stitch Hole Tear Strength of at least 2.0 or 5.0 pounds. Doing so, adds strength to the base and also provides a substantial modification of the base of the hook component that can suffer tear by repeated use of the touch fastener.

Kingsford and Provost fail to disclose that hook base includes a fabric backing laminated to a side of the hook base opposite the fastener elements. However, it would have been obvious to one having ordinary skill in the art at the time the invention was



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made to have a hook base includes a fabric backing laminated to a side of the hook base opposite the fastener elements because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

**(10) Response to Argument**

Arguments against the rejection of claims 1-3, 7-20, 24-37 and 39-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kingsford et al. (US 6,851,161 B2) in view of Provost et al. (US 4,984,339).

The Applicant argues that Kingsford fails to disclose that the releasable touch fastener has a final peel force of 0.3 pounds per inch of closure width. The Examiner concedes that Kingsford fails to disclose that the release touch fastener has a final peel force of 0.3 pounds per inch of closure, however, it is possible that Kingsford meets this limitation since the combination of the hook and loop fasteners with a rib and groove sealing closure provides a resistance to peel that could meet this limitation when the loop base and the hook base are being pulled apart from each other. Nonetheless, the Examiner modified the hook and loop fasteners of Kingsford with the hook and loop fasteners of Provost since Provost discloses that the hook and loop fastener has a peel of at least 0.3 pounds per inch of closure width.

Another argument made by the Applicant is that Kingsford fails to disclose the need for a particularly strong closure and consequently that the Examiner can not establish a prima facie case of obviousness since Kingsford does not provide any suggestion or motivation for this combination and that the combination will not provide a reasonable expectation of success. The Examiner fails to be persuaded by this

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argument. Kingsford is combining the rib and groove sealing closure with a hook and loop fastener to provide additional means preventing unwanted opening. Accordingly, one having ordinary skill in the art at the time the invention was made will acknowledge that providing a strong closure, as the one taught by Provost, will be desired since the strong closure will ensure that the touch fastener performs its function of preventing unwanted opening due to the strength of the closure.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., hooks as part of a low profile closure) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In this case, the claims do not recite that the touch fastener is a low profile closure.

The Applicant argues that Kingsford discloses that the hook height is 0.050 inches  $\pm$  0.002 inches but it fails to disclose the overall closure thickness. The Examiner fails to be persuaded by this argument because the required engaged thickness of 0.11 inch since there is 0.060 inches left to meet this limitation and Figure 24, although not to scale, illustrates that the height of the loop fastener is meant to be smaller than the height of the hook fastener and therefore the limitation can be met.,

The Applicant argues that Provost fails to disclose that the data is for final or initial peel. The Examiner fails to be persuaded by this argument because the claimed initial peel (force required to initiate the peeling separation of the hook base from the

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loop base) is claimed is 0.3 pounds per inch of closure width and the final peel (force required to continue the peeling separation after the initial peel) is 0.5 pounds per inch of closure width and the values disclosed by Kingsford vary from 0.87 to 2.80 pounds per inch of closure width (depending upon the material as shown in Table III) and these values clearly exceed the claimed values for the initial peel resistance and the final peel resistance.

The next argument is that the peel resistance is a function of the combination of the hook and loop and that Provost is silent about the characteristics of the loop fastener being used. This argument fails to persuade because lines 27-58 of column 9 and Figure 24 provides the details for the loop fastener.

The Applicants now argue that the Examiner takes official notice about the bi-directional male fastener component and the woven fabric loop component are well known in the art and the Applicants do not agree with the Examiner's of used official notices against patentability. The Applicant failed to make this argument during the prosecution. However, Provost illustrates a bi-directional male fastener among the prior art examples and Kennedy (used to reject claims 5, 6, 23, 22, 39, 40 and 55-57) discloses the use of woven fabric loop.

The Applicant argues that the combination of the limitations of claim 1 with the limitations of claim 2 do not yield the limitations of claim 19 since claim 19 does not require the initial peel required for claim 1. The Examiner fails to be persuaded by this argument because claim 19 uses the open ended transitional phrase "comprising" and therefore other elements can be present in the reference being used to reject the

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claims. Additionally, as argued above, the peel taught by Provost meets the limitations since the peel is between 0.87 and 2.80 pounds per inch of closure width irregardless of whether initial or final peel is being claimed.

The Applicant makes the same argument for claim 37 since the Examiner recites the combination of the limitations of claim 1 and the limitations of claim 3 to reject claim 37 and claim 37 does not require the initial peel required for claim 1. The Examiner fails to be persuaded by this argument because claim 37 uses the open ended transitional phrase "comprising" and therefore other elements can be present in the reference being used to reject the claims. Additionally, the shear resistance taught by Provost meets the limitations since the shear resistance 12.5 and 50.5 pounds per square inch and exceeds the claimed value of 10 pounds per square inch irregardless of whether the initial peel is being claimed.

Arguments against the rejection of claims 5, 6, 23, 22, 39, 40 and 55-57 under 35 U.S.C. 103(a) as being unpatentable over Kingsford et al. in view of Provost et al. as applied to claim 1, 19 and 37 above, and further in view of Kennedy et al.

The Applicants argue that Kingsford, Provost and Kennedy fail to disclose a stitch hole tear strength of 2.0 or 5.0 pounds and the Examiner or Office has the burden of proving that inherency necessarily flows from the disclosure of the reference being used to reject the claim, in this case Kennedy. The claims do not define what is the stitch hole tear strength, how it is determined and what structure is provided to accomplish the cited values. Therefore, any structure that can be used reinforce the base of the hook component can inherently meet this claim limitation because such a

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reinforcement is usually provided to strengthen the base and it can inherently resist a force of 2.0 or 5.0 pounds.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,

/RCR/

Ruth C. Rodriguez

Conferees

Judy Swann

Handwritten signature of Judy Swann in cursive script.

Meredith Petravich

Handwritten signature of Meredith Petravich in cursive script.